

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Please cancel claims 1-94 without prejudice and add the following new claims.

1-94. (Cancelled)

95. (New) A heavy chain of a monoclonal antibody having an antagonistic activity capable of binding to CD40, wherein the heavy chain comprises a constant region with at least one amino acid deleted or substituted, or with at least one amino acid added thereto, said deletion, substitution or addition being capable of increasing or decreasing ADCC and/or CDC.

96. (New) The heavy chain according to claim 95, wherein the constant region is derived from a human IgG.

97. (New) The heavy chain according to claim 96, wherein the human IgG is a human IgG1.

98. (New) The heavy chain according to claim 96, wherein the human IgG is a human IgG2.

99. (New) The heavy chain according to claim 96, wherein the human IgG is a human IgG3.

100. (New) The heavy chain according to claim 96, wherein the human IgG is a human IgG4.

101. (New) The heavy chain according to any one of claims 97, 99, and 100, wherein said substitution of amino acids in the constant region is substitution of leucine with glutamic acid at position 235 which is indicated by the EU index as in Kabat et al.

102. (New) A heavy chain according to any one of claims 95 to 101, wherein the heavy chain comprises a constant region with at least one amino acid deleted or substituted, or with at least one amino acid added thereto, said deletion, substitution or addition being capable of promoting the formation of the S-S bond between the heavy chains.

103. (New) The antibody heavy chain according to claim 102, wherein said substitution of amino acids in the constant region is substitution of serine with proline at position 228 which is indicated by the EU index as in Kabat et al.

104. (New) A monoclonal antibody comprising the heavy chain according to any one of claims 95 to 103.
105. (New) The heavy chain according to any one of claims 95 to 103, wherein the heavy chain comprises a variable region from a heavy chain of a monoclonal antibody produced by the hybridoma 4DII (Accession No. FERM BP-7758).
106. (New) A monoclonal antibody consisting of the heavy chain according to claim 105 and a light chain comprising a variable region from a light chain of a monoclonal antibody produced by the hybridoma 4D11 (Accession No. FERM BP-7758).
107. (New) The heavy chain according to any one of claims 95 to 103, wherein the heavy chain comprises a variable region of the c. polypeptide represented by SEQ ID NO: 46.
108. (New) A monoclonal antibody consisting of the heavy chain according to claim 107 and a light chain of a monoclonal antibody, wherein the light chain comprises a variable region of the polypeptide represented by SEQ ID NO: 48.
109. (New) The heavy chain according to claim 95, wherein the heavy chain consists of a remaining portion provided by removing the signal sequence from the polypeptide represented by SEQ ID NO: 140.
110. (New) A monoclonal antibody consisting of the heavy chain according to claim 109 and a light chain of a monoclonal antibody, wherein the light chain consists of a remaining portion provided by removing the signal sequence from the polypeptide represented by SEQ ID NO: 142.
111. (New) The heavy chain according to claim 95, wherein the heavy chain is produced by a host comprising an expression vector having the polynucleotide represented by SEQ ID NO: 139.
112. (New) The monoclonal antibody according to claim 104, wherein the monoclonal antibody is produced by a host comprising an expression vector having the polynucleotide represented by SEQ ID NO: 139 and the polynucleotide represented by SEQ ID NO: 141.
113. (New) A polynucleotide represented by SEQ ID NO: 139.
114. (New) A polynucleotide represented by SEQ ID NO: 141.
115. (New) An expression vector having the polynucleotide according to claim 113.
116. (New) An expression vector having the polynucleotide according to claim 114.

- 117. (New) An expression vector having the polynucleotides according to claims 113 and 114.
- 118. (New) A host comprising the expression vector according to claim 113.
- 119. (New) A host comprising the expression vector according to claim 116.
- 120. (New) A host comprising the expression vector according to claim 117.
- 121. (New) A process of producing a heavy chain of a monoclonal antibody, comprising the steps of: culturing the host according to claim 118 in a culture medium; and obtaining a heavy chain of a monoclonal antibody from the culture and/or the host.
- 122. (New) A process of producing a monoclonal antibody, comprising the steps of: culturing the host according to claim 120 in a culture medium; and obtaining a monoclonal antibody from the culture and/or the host.
- 123. (New) A pharmaceutical composition comprising the monoclonal antibody according to any one of claims 104, 106, 108, 110 and 112 as an active ingredient.
- 124. (New) The pharmaceutical composition according to claim 123 used for prevention or treatment of transplant rejection, autoimmune diseases, allergy or blood clotting factor VIII inhibition.
- 125. (New) A method of prevention or treatment of transplant rejection, autoimmune diseases, allergy or blood clotting f factor VIII inhibition, which comprises administering the pharmaceutical composition according to claim 123 into a mammal.
- 126. (New) Use of the monoclonal antibody according to any one of claims 104, 106, 108, 110 and 112 for production of a pharmaceutical composition used for prevention or treatment of transplant rejection, autoimmune diseases, allergy or blood clotting factor VIII inhibition.
- 127. (New) A method of producing a heavy chain of a monoclonal antibody having an antagonistic activity capable of binding to CD40, wherein the agonistic activity is lowered, comprising the step of carrying out deletion or substitution of at least one amino acid, or addition of at least one amino acid in the heavy chain constant region of a human antibody.
- 128. (New) The method according to claim 127, wherein the constant region is derived from a human IgG.
- 129. (New) The method according to claim 128, wherein the human IgG is a human IgG4.

130. (New) The method according to any one of claims 127 to 129, wherein said substitution of amino acids in the constant region is substitution of leucine with glutamic acid at position 235 which is indicated by the EU index as in Kabat et al.

131. (New) A polynucleotide provided by removing the portion encoding the signal sequence from the polynucleotide represented by SEQ ID NO: 131.

132. (New) A polynucleotide provided by removing the portion encoding the signal sequence from the polynucleotide represented by SEQ ID NO: 133.

133. (New) A polynucleotide provided by removing the portion encoding the signal sequence from the polynucleotide represented by SEQ ID NO: 135.

134. (New) A polynucleotide provided by removing the portion encoding the signal sequence from the polynucleotide represented by SEQ ID NO: 137.

135. (New) A polynucleotide provided by removing the portion encoding the signal sequence from the polynucleotide represented by SEQ ID NO: 139.

136. (New) A polynucleotide provided by removing the portion encoding the signal sequence from the polynucleotide represented by SEQ ID NO: 141.